

Discovery Report Appendix O

Watershed Recommended Scope of Work

Lake Ontario – Irondequoit-Ninemile Watershed

HUC 04140101

July 2016



Federal Emergency Management Agency
Department of Homeland Security
26 Federal Plaza
New York, NY

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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March 1, 2016

Mr. Alan Springett
FEMA Region II
26 Federal Plaza
New York, NY 10278-0002

Re: Irondequoit-Ninemile Watershed Recommended Scope of Work

Dear Mr. Springett:

Please accept the State's priorities for new or revised floodplain mapping within the Irondequoit-Ninemile watershed as developed through the Lake Ontario Discovery project. Pre-Discovery community engagement meetings were held for the Irondequoit-Ninemile watershed via webinar the week of September 16, 2013. The purpose of the pre-Discovery webinars was to discuss the Discovery process and collect information on community mapping needs, as well as determine if any data exists could be incorporated into a possible Risk MAP project. There were nine webinar meetings held for the counties, communities, and other interested stakeholders throughout the Lake Ontario Contributing watershed area. Stakeholders within the Irondequoit-Ninemile watershed were specifically invited to attend the pre-Discovery webinars on September 17 and September 18, 2013; however they were welcome to attend any of the nine webinars held that week. Participation on the webinars was mixed with some counties and communities very interested in providing feedback and other communities taking a less active role.

Following the pre-Discovery Engagement meetings the project team held ten Discovery meetings for stakeholders within the Lake Ontario Contributing watersheds during the weeks of November 11th and November 18th, 2013. There were three in-person meetings held for stakeholders within the Irondequoit-Ninemile watershed. On meeting were held on November 12th, another on November 19th, and the third on November 21st. During these meetings the project team followed up on the information collected during the pre-Discovery meetings and provided an additional opportunity for the communities and other stakeholders to give further information on mapping needs. NYSDEC used the information collected throughout the Discovery process to develop this proposed scope. Certainly more stream requests were provided than can be studied as part of this project and all additional study requests will be entered into CNMS to be considered for future floodplain mapping projects.

The Irondequoit-Ninemile Watershed is the one of the eight watersheds that make up the larger Lake Ontario watershed. This watershed consists of five counties and 31 communities. Portions of Cayuga, Monroe, Ontario, Oswego, and Wayne Counties are within the watershed. Only a small area of the town of Victor in Ontario County is within the watershed. A majority of the communities within the Irondequoit-Ninemile watershed attended the Pre-Discovery meeting and/or the Discovery meeting to provide requests for updated stream studies.

Wayne County communities have the older flat map style Flood Insurance Rate Maps (FIRMs) which were developed in the 1970s and early 1980s. These communities would benefit from a modernized Countywide DFIRM. The community officials find the existing maps very difficult to work with and find it challenging to locate structures on these maps accurately. A wholesale restudy of each community may not be warranted, but there are a few key stream segments which

may require new detailed studies. The new detailed studies combined with updated approximate studies in a new digital format would assist both the communities and the county in enforcing floodplain regulations and managing development. NYSDEC feels that a digital conversion for the communities within Wayne County along with a few select detailed studies listed in the watershed priorities below is the highest priority for the Irondequoit-Ninemile Watershed.

The portion of Ontario County accounts for only three percent of the land area that makes up the Irondequoit-Ninemile watershed. The Town of Victor is the only community within Ontario County that has a portion of the community within the watershed. The majority of Ontario County falls within the Seneca Watershed, and the stream study requests for Ontario County and the Town of Victor collected during the Lake Ontario Watershed Discovery project fall within the Seneca Watershed. There has been a separate Discovery effort for the Seneca Watershed and any requests that fall within that watershed can be found in the June 2015 Seneca Watershed Discovery Report.

Cayuga, Oswego, and Monroe Counties have been through countywide mapping revisions and have updated approximate studies. The Oswego County mapping revision was a redelineation of existing detailed studies onto new topography data. No new or updated detailed studies were completed. Not all detailed streams were restudied as part of the mapping revisions within Cayuga and Monroe Counties. Since only select detailed studies if any were revised within these counties, the communities within these three counties still have requests for new detailed studies due to the age of the current studies and changes in hydrology and or hydraulics for the stream.

Beyond upgrading the existing detailed and approximate mapping to a digital format Wayne County, which is NYSDEC's highest priority for this watershed, the Irondequoit-Ninemile Watershed stream study priorities for detailed studies are as follows.

High Priority Detailed Studies:

1. The Lake Ontario shoreline, including all bays and harbors such as Maxwell Bay, Port Bay, East Bay and Pultneyville Harbor, should be studied by detailed methods for its entire length within the Irondequoit-Ninemile watershed. The counties and communities have expressed various needs for new detailed mapping along the shoreline. Monroe County has expressed a need for new base flood elevations due to growth and development along Lake Ontario. Communities within Cayuga and Wayne Counties have expressed a need for detailed base flood elevations along the lake due to high erosion rates and low lying topography that needs more detailed mapping. Wayne County indicated the bays and harbors along the Lake Ontario shoreline should be included in the study. Several counties and communities have also expressed concerns about impacts that may occur due to changes in lake level regulation due to proposals by the International Joint Commission (IJC). This study was requested by Cayuga County, Town of Sterling, Monroe County, Town of Irondequoit, Wayne County, Town of Ontario, Town of Sodus, Village of Sodus Point, and the Town of Williamson.
2. Irondequoit Bay should be studied by detailed methods due to conflicting base flood elevations between neighboring communities along the bay. The Towns of Irondequoit and Penfield and the City of Rochester have a base flood elevation of 251 feet while the Town of Webster has a base flood elevation of 249 feet. This study was requested by Monroe County, Town of Penfield, and the Town of Irondequoit in Monroe County.
3. Irondequoit Creek should be studied by detailed methods for 35.59 miles due to the age of the current study and the frequency of flooding events along the creek. This study was requested by Monroe County and the Town of Perinton in Monroe County.

4. Sodus Bay should be studied by detailed methods due to development along the bay and the age of the current study. This study was requested by Wayne County, Town of Huron, and Village of Sodus Point.
5. Sodus Creek needs a new detailed study from its confluence with Sodus Bay to the upstream Town of Huron corporate limits for a distance of 2.23 miles due to flooding caused by bridge on State Route 104. Route 104 will be widened from 104A to the City by the NYSDOT within the next five years. This study was requested by the Town of Huron.
6. East Branch Allen Creek needs an updated detailed study for 7.7 miles between the northwest corporate limits and Calkins Road in the Town of Pittsford due to recent construction of upland stormwater management facilities that have the potential to lower base flood elevations. The study should also be updated to reflect the culvert that was replaced on Calkins Road due to the replacement culvert size being larger than the culvert existing at the time of the current study. The floodplain boundary between Stone Road and Calkins Road also does not match the topography of the area. This study was requested by the Town of Pittsford in Monroe County.
7. Ninemile Creek should be studied by detailed methods from its confluence with Lake Ontario to the upstream Town of Sterling corporate limits for a distance of 2.74 miles due to proposed development in the area. The current study is an approximate study. This study was requested by the Town of Sterling.
8. First Creek should have a new detailed study 0.9 miles within the Village of Sodus Point and the Town of Sodus. The area at the mouth of the creek is the first to flood and the Village may have bathymetry data for this area. This study was requested by the Village of Sodus Point in Wayne County.
9. Salmon Creek (west) in the Town of Williamson should be studied by detailed methods from its confluence with Lake Ontario to Ridge Chapel Road for a distance of 7.1 miles due to the low lying topography, current age of the study, and possibly inaccuracies with the current mapping. This study was requested by Wayne County.
10. Dennison Creek should be studied by detailed methods from its confluence with Lake Ontario to Whitney Road in the Town of Ontario for a distance of 7.25 miles due to the low lying topography, current age of the study, and possibly inaccuracies with the current mapping. This study was requested by Wayne County.
11. Allen Creek should be a detailed study from its confluence with Irondequoit Creek to Route 252 for a distance of 4.94 miles due to development pressures along the stream in the Towns of Brighton and Pittsford. There is a plan for 137 acres of mixed commercial and residential development within the Town of Brighton along this study reach. This stream study was requested by the Towns of Brighton and Pittsford.
12. Shipbuilders Creek should be a new detailed study for 3.79 miles within the Town of Webster and Penfield. The Town of Webster would like the current study within the town to be updated from the southern corporate limits to Kelm Road for 2.93 miles due to the development of Empire Park and the residential development of Brookville Drive that

occurred in the 1990s. The Town of Penfield would like the detailed study to extend into Penfield to its upstream limits since the effective study ends at the town line between Webster and Penfield.

13. Fourmile Creek should be an updated detailed study for 9.1 miles, the entire length of the stream through the Town of Webster, due to bridge replacements at two locations over the creek on County Route 4 and bridge replacements on State Road and Salt Road. There have also been developments of coastal and creek edge home and town houses along the creek. This study was requested by the Town of Webster.

Medium Detailed Study Priorities:

14. Thousand Acre Brook should be a new detailed study from its confluence with Irondequoit Creek to its upstream limits in Thousand Acre Swamp for a distance of 3.6 miles. There has been development near the intersection of Whalen Road and Five Mile Line and many homes experience flooding in the yards. This study was requested by the Town of Penfield.
15. Buckland Creek should be an updated detailed study from its confluence with Allen Creek to a point upstream of Elmwood for a distance of 4.07 miles due to stream restoration and culvert replacement by the County Department of Transportation. This study was requested by the Town of Brighton.
16. The New York State Barge Canal should be a new detailed study for approximately 8.67 miles through the Town of Perinton, including the Village of Fairport, due to development in the areas near the canal. This study was requested by the Town of Perinton.
17. Thomas Creek should be restudied by detailed methods for 1.55 miles within the Village of Fairport due to the canal spillway that flows into Thomas Creek near Water Street. The canal floods when the creek is high. This study was requested by the Village of Fairport.
18. West Brook needs an updated detailed study for a distance of 1.94 miles completed from south of the Barge Canal to Kerrygold Way due to improved stormwater management facilities located near Tobey Road that serve to reduce flooding in the area. There is a portion of West Brook that is currently an approximate study from the canal north to the confluence with East Branch. This stream study was requested by the Town of Pittsford.
19. Allen Creek Tributary should be studied by detailed methods from its confluence with Allen Creek to Clinton Avenue for a distance of 1.44 miles. The stream request was made due to the development of 327 acres for mixed use residential and office space. This study was requested by the Town of Brighton.

Lower Priority Detailed Studies:

20. Bear Creek should be a detailed study from its confluence with Lake Ontario upstream to Paddy Lane for a distance of 7.21 miles in the Town of Ontario. This stream study was requested by Wayne County.

21. Maxwell Creek should be studied using detailed methods from its confluence with Maxwell Bay to its upstream limits near North Geneva Road in the Village of Sodus Point for a distance of 1.25 miles. This stream study was requested by Wayne County.
22. The unnamed tributary to Thomas Creek should be a detailed study from its confluence with Thomas Creek to its upstream limits for a distance of 3.35 miles in the Town of Penfield. The Town has additional GIS data for this area and it is a wide floodplain that needs base flood elevations. This stream study was requested by the Town of Penfield.
23. Mill Creek should be an updated detailed study for 1.94 miles from the confluence with 2nd Unnamed Tributary to Mill Creek to Orchard Road in the Town of Webster due to a culvert replacement on Imperial Drive. This study was requested by the Town of Webster.
24. There is an unnamed tributary to Irondequoit Creek in an area of high development along Golf Stream Drive in the Town of Perinton that is not mapped. There should be a new detailed study for this stream from its confluence with Irondequoit Creek to its upstream limits in the Town of Penfield for a distance of 2.04 miles. This study was requested by the Town of Perinton.
25. The unnamed tributary to Thomas Creek that crosses Furman Road in the northeast corner of the Town of Perinton should be a new detailed study from its confluence with Thomas Creek to its upstream limits near Watson Hill Road for a distance of 1.7 miles due to flooding in the area. This study was requested by the Town of Perinton.
26. The unnamed tributary to White Brook should be a detailed study for 2.12 miles from its confluence with White Brook to just past Mason Road in the Town of Perinton. This is an area that is highly developed that is not currently mapped. This study was requested by the Town of Perinton.
27. The unnamed stream near the intersection of Ayrault Road and Turk Hill in the Town of Perinton should be a new detailed study from its confluence with the Erie Canal to Route 250 for a distance of 2.26 miles due to the high level of development. This study was requested by the Town of Perinton.
28. Tributary Number 1 to East Branch Allen Creek should have an updated detailed study from its confluence with the East Branch Allen Creek to Stone Road for a distance of 0.52 miles in the Town of Pittsford due to new stormwater management facilities and newly constructed stormwater sewer improvements. This study was requested by the Town of Pittsford.
29. Mill Creek should be studied by detailed methods for 0.96 miles from south of VanVoorhis Road to the southern corporate limits of the Town of Pittsford. This stream currently is an unstudied area and has the potential to be a flood hazard. This study was requested by the Town of Pittsford.
30. The Unnamed tributaries in the area of Schlegel Road should be a new detailed study for a total of 6.7 miles due to development in the area. These streams are currently not studied. This was requested by the Town of Webster.

In addition to the requests for new or updated detailed studies within the watershed, there were also several requests for updated approximate studies. The priorities for the approximate study request are:

1. Sodus Creek should be a new approximate study for 9.18 miles in the Town of Rose due to seasonal flooding and a large flooding event that caused damages in the late 1990's. This study was requested by the Town of Rose.
2. Wolcott Creek should be an updated digital approximate study for 15.73 miles including Mill Pond in the Towns of Wolcott and Butter and the Village of Wolcott due to the age and scale of the current study. The community officials find the current maps to be unusable for determinations. This stream study was requested by the Town of Butler and Wayne County.
3. There should be a new approximate study of the Unnamed Tributary to Salmon Creek for 1.25 miles in the southeastern corner of the Town of Williamson from Tripp Road slightly beyond Townline Road due to flooding in this area. This stream is currently unstudied in Williamson, but is studied in the Town of Sodus.
4. There should be an updated approximate study of Sterling Creek for 10.4 miles due to the flooding of a campground in 2005/2006. The owner of the camp ground claims it is not in the floodplain. There have also been changes to the streams hydraulics due to bridge and culvert replacements along the stream. This stream study was requested by the Town of Sterling.
5. There should be a new approximate study for the unnamed tributary to Little Sodus Bay for approximately 0.65 miles. There is a section of the stream that is piped near Fair Haven Road and the Main Street culvert was replaced in 2006 or 2007. This stream study was requested by the Village of Fair Haven.
6. Ninemile Creek Tributary No. 1 should be an updated approximate study for 1.5 miles from the confluence with Ninemile Creek in the Town of Oswego. The current floodplain boundary is inaccurate.
7. Wayne County requested Second Creek in the Town of Sodus be studied as an approximate study for its entire distance of 7.10 miles within the Town.
8. Wayne County requested Third Creek in the Towns of Sodus and Huron be studied as an approximate study for its entire distance of 6.6 miles.
9. Beaver Creek was requested by Wayne County as an approximate study in the Town of Huron from its confluence with Port Bay to Richardson Road for a distance of 2.85 miles.
10. Jack Creek was requested by Wayne County as an approximate study in the Town of Williamson from its confluence with Lake Ontario to its upstream limits for a distance of 6.05 miles.

11. Mink Creek was requested by Wayne County as an approximate study in the Town of Williamson. This study segment should start at its confluence with Lake Ontario and extend to its upstream limits for a distance of 7.40 miles.
12. Little Creek was requested by Wayne County to be a new approximate study in the Town of Wolcott. This stream should be studied from its confluence with Red Creek to its upstream limits for a distance of 5.27 miles.
13. Black Creek was requested by Wayne County as an approximate study in the Town of Wolcott for a distance of 4.25 miles. The existing approximate study is only a small stream segment and should be expanded to include its entire length.
14. The Town of Walworth and the Village of Wolcott both requested that all approximate studies within the community be updated to a new digital format due to the age and usability of the current effective maps.

It is NYSDEC's understanding that in counties receiving new detailed modeling all existing approximate studies will be updated where topography is available. These existing approximate studies will not be listed separately at this time. NYSDEC would also like to request that any existing Lake BFE's that were determined and published as part of the LOMA process be included on the new maps if possible. This would enable communities to adopt the flood elevations and would allow residents currently residing along these lakes and ponds to have accurately rated flood insurance policies.

Thank you for providing NYSDEC with the opportunity to recommend a scope of work for areas within the Irondequoit-Ninemile Watershed. We look forward to working with you to refine and finalize this scope as we move forward. Please feel free to contact NYSDEC if you have any questions or would like additional information provided.

Sincerely,

A handwritten signature in cursive script that reads "Jennifer Horton".

Jennifer Horton
Environmental Engineer
Floodplain Management Section